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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,485	01/27/2004	Zhiqun He	CU-4996	6280
26530 7590 07/10/2008 LADAS & PARRY LLP 224 SOUTH MICHIGAN AVENUE SUITE 1600 CHICAGO, IL 60604				
EXAMINER				
ELALLAM, AHMED				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/764,485

Applicant(s)

HE ET AL.

Examiner

AHMED ELALLAM

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-15 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 21 March 2008 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Specification

1. The amendment filed 3/21/2008 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

In step 5, it is determined whether the data frames are sent to the processing device or the virtual interface device, as amended in paragraph [0063]

the data frames are sent to the [[a]] virtual interface device, go to step 8; if the data frames are sent to the processing device, go to step 6, as amended in paragraph [0063].

a virtual private device 120 and a plurality of virtual bridge devices 100 and a RPR device 110 coupled with the data processing and dispatching device. Although a virtual private device 120, a plurality of virtual bridge devices 100 and a RPR device 110 are described in the present application, as amended in paragraph [0057].

Similar objection applies to the paragraph inserted between paragraph [0093] and [0094].

The paragraph placed between paragraph [0159] and [0160] does not correspond to the deleted material from paragraph [0160]. For example "**a plurality of**

virtual private devices 120" has been changed to **"a virtual private device120"**, and **"a virtual bridge device 100"** has been changed to **"a plurality of virtual bridge devices 100"**.

Similarly, the amendment to the specification of deleting the term "corresponding" from paragraphs [0009], [0017], [0022], [0025], [0066], [0074], [0174], [0175], [0176] **through** [0195]. Such deletion of terms "corresponding" gives a broader scope of following limitations than originally filed.

Also the amendment to figure 4(F) is objected to. The specification as originally filed does not provide for the amendment of step 5.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the preamble indicates a single UNI, and in the body of the claim reference is made to data frames outputted to the UNI. Frames being processed are

Art Unit: 2616

understood to come at least in part from the UNI, however outputting the frames after processing to the same UNI is confusing since it is not clear why such processing need to be done in the first place.

Claims 2-15 depend from claim 1, thus they are subject to the same rejections.

3. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01.

As to claim 1, the omitted steps are the steps specified in the drawing of original figure 4(F), as an example, the claim does not specify that "the data processing and dispatching device find corresponding unit according to the data type number in the data frames.

Claims 2-15 depend from claim 1, thus it is subject to the same rejection.

Thus the missing method step of "the data processing and dispatching device" from the body of the claim is not given patentable weight in the examination of the claims.

4. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the preamble in claim 1 refers to a plurality of elements/ and devices, such as UNI, NNI, mapping/demapping device, a virtual interface device, and

data processing and dispatching device. In addition the preamble is directed to a method. However, the body of the claim doesn't specify the steps performed by each recited element/or devices in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Kong et al, US 20020176450 A1. Hereinafter referred to as Kong.

Regarding claim 1, with regard to figure 1, Kong discloses a method for processing data through a system for accessing and transmitting different data frames in SONET/SDH optical networks system (claimed digital transmission network), the method comprising:

a line interface in a SONET mapper/framer (unit 62, figure1) (claimed virtual interface device) for selectively carrying Ethernet signals by classifying the packets in Ethernet signals and mapping the classified packets to virtual

concatenation channels so to provide different COS (Class Of Service) to the clients , see paragraphs [0014] and [0034], the mapper/framer (claimed processing device) (Claimed virtual interface device classifying the data frames; and the virtual interface device outputting the data frames to processing device for processing).

Kong further discloses using private line service, see figure paragraphs [0060]-[0062], (claimed obtaining by the virtual interface device processed data frames and outputting the processed data frames to the UNNI or NNI).

(It is implicit to Kong to process data prior to COS provisioning, and that reads on the claimed data processing and dispatching device).

Regarding claims 2 and 15, with reference to figure 1, Kong discloses a router/switch in connection with mapper/framer for switching the data frames. (Claimed method also comprises the step of the virtual bridge device switching the data frames).

Regarding claims 3 and 4 , Kong discloses encapsulating the Ethernet packets within a type of frame format such as POS or GFR (within the framer/mapper). See paragraph [0042].

Regarding claim 5, Kong discloses encapsulating the Ethernet packets within a type of frame format such as POS or GFR. See paragraph [0042]. Kong additionally discloses that the GFP can be used to carry Ethernet MAC frames over SONET in a ring topology, see paragraph [0036]. (Claimed processing the data frames by the Resilient Packet Ring device).

Regarding claims 6-8, with reference to figure 3, Kong discloses the functionality of the interface classifies the packets and allocates the packets onto a plurality of channels 108-1, . . . 108-m. see paragraph [0059]. (Claimed processing the data frames comprises terminating sending and/or relaying and/or beginning to send the data frames).

Regarding claims 9-14 , with reference to figure 3, Kong discloses the interface being divided into two blocks the functionality of the 100 and 102, Block 100 takes Ethernet signals, classifies the packets in the Ethernet pipes, and allocates the packets onto a plurality of channels 108-1, . . . 108-m. Block 102 maps the packets on channels 108-1, . . . 108-m into SONET payload and allocate them onto VC channels 112-1, . . . 112-m. Block 100 includes a mapping mechanism 106 which has the basic functionality of terminating the Ethernet line coding, to use GbE (Gigabit Ethernet) , Kong further discloses that block 106 also encapsulated the Ethernet frame with GFP frame. An extension header is used or a double tagged method of the Ethernet frame using VCL or VLAN tag (see FIG. 6). (it should be noted that a reverse process id required for data frames coming from the opposite direction, i.e. from the sonnet network toward clients).

Response to Arguments

6. Applicant's arguments filed 03/21/2008 have been fully considered but they are not persuasive.

Applicants' Amendment to figures FIGS. 1, 2A, 2B, and 3 overcomes the objections to the missing Prior art labels.

Applicants with the exception of curing the above "prior art labels" contend that the Amendment to specification overcomes the rejections under 112 1st rejections. Applicants stated "*Specifically, the applicants have amended paragraph 63 so that it now includes: **It is determined whether the data frames are sent to the processing device or the virtual interface device***" Emphasis added. Examiner respectfully disagrees for the reasons indicated above with regard to 112 1st rejections. It should be noted that the amended limitation above appears in Amended figure 4(F) step 5. This limitation is believed to constitute a new matter based on at least on the fact that the original figure 4(F) belong to other Applications by the same inventors and were not subject to any Amendment while some have been already patented.

Applicant further based his argument on the amended Application pages 40-41. Examiner respectfully disagrees given the new matter issue.

102 Rejections:

Applicants amended claim 1 to recite "**transmitting, via the data processing and dispatching device, the classified data frames from the virtual interface device to a processing device for processing**". Applicant alleged that support for such limitation is found in the specification [0057] and [0062]. Examiner notes that paragraph [0057] is subjected to new matter issues as indicated above and can not be relied upon as amended, as to paragraph [0062], This paragraph contains subject matter that is not claimed. Paragraph [0062] recites: "In step 4, the data processing

and dispatching device finds a corresponding processing device according to the data type number in the data frames”.

Applicant argues that Kong does not anticipate claim 1, Applicants argue that the processing device are the virtual bridge, the virtual private device, or the RPR, (Argument page 42 last paragraph) to compare with the teaching of Kong. In response Examiner notes while it is appropriate to use the specification to determine what applicant intends a term to mean, a positive limitation from the specification cannot be read into a claim that does not itself impose that limitation.

Applicants argue that *“The processing device in this application cannot be equivalent to the virtual concatenation channels in Kong. As is understood by those skilled in the art, the virtual concatenation channels should be understood as ports, through which data frames are transported in turn. However, in the presently claimed invention, the –processing device– is a device for processing data frames and sending back processed data frames to the data processing and dispatching device”*. Emphasis added.

In response Examiner respectfully disagrees. The frames of Kong are subject to a plethora of processing stages prior to be input to the virtual concatenation channels. see for Example paragraph [0060]-[0061] for processing frames prior to transmission, such processing read on both the *data processing and dispatching device* and *processing devices*. The same teaching of Kong clearly provides for argument that *“the classified data frames are distributed to a processing device, then processed in the processing device”*.

Given the most reasonable broadest interpretation of the claim limitations, Examiner believes that Kong anticipates the invention as claimed, and the rejection above is proper.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: See for PTO 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AHMED ELALLAM whose telephone number is (571)272-3097. The examiner can normally be reached on 7-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2616

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7/6/08

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